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S.R.

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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| EXAMINER |
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WILLIAM H DIPPERT
COWAN LIEBOWITZ & LATMAN
1133 AVENUE OF THE AMERICAS
NEW YORK NY 10036-6799

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| LAYNO, C | |
| ART UNIT | PAPER NUMBER |

3762

#14

DATE MAILED:

01/25/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/101,723

Applicant(s)

BEN HAIM et al

Examiner

CARL H. LAYNO

Group Art Unit

3762

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 7/7/00
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-60 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 16, 17, 24-27, 46, And 52-57 is/are allowed.
- ☒ Claim(s) 1-3, 10, 13, 14, 18-21, 30, 31, 35, 37, 38, 44, 47, 49, 51, 53 is/are rejected.
- ☒ Claim(s) 4-9, 11, 12, 15, 22, 23, 28, 29, 32-34, 36, 39-43, 45, 48, 50, 54, 60 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 11
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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DETAILED ACTION

1. Claims 1-60 are active.

Information Disclosure Statement

2. Acknowledgment is made of applicant's Second Supplemental Information Disclosure Statement (PTO-1449) which was received by the Office on July 7, 2000. This document has been made of record in the file as Paper No.11.

Drawings

3. Applicant's formal drawings were received by the Office on July 21, 2000 and have been made of record in the file as Paper No.12. These drawings have been approved by the Examiner.

Withdrawal From Issue under 37 CFR 1.313(a)

4. Having reviewed the applicant's recently submitted prior art, the Examiner is withdrawing the previous allowability of claims 1-3, 10, 13, 14, 18-21, 30, 31, 35, 37, 38, 44, 47, 49, 51, and 58 under 37 CFR 1.313(b)(3) in view of the Prystowski et al '922 patent which appears to read upon the device features and method steps of these claims thus making them unpatentable..

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Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 10, 13, 14, 18-21, 30, 31, 35, 37, 38, 44, 47, 49, 51, and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Prystowsky et al '922 (Applicant's prior art).

The Prystowsky et al '922, cited by the applicant as prior art, describes a method of inhibiting cardiac arrhythmias using a stimulator/pacemaker **60** (Fig.8) having a plurality of electrodes located at various points on a patient's heart **52** (col.6, lines 16-28). Each electrode is capable of outputting a non-excitatory electrical pulse S_c during a refractory period between heartbeats (Fig.1). These electrical pulses (localized electric fields) occur during the refractory period between heart beats (see Fig.1) and inhibit heart beat propagation, particularly at areas between the electrodes (i.e. locations denoted by the number **74** in Fig.1).

In regard to claims 3, 21, and 31, applicant's attention is directed to Figs.3 and 5 which show that the non-excitatory electrical pulses S_c appear to be bipolar, inherently generating both an alternating voltage and subsequent current.

In regard to claims 10 and 35, by inhibiting the onset of premature arrhythmic heart beats **40** (Fig.6), the Prystowsky et al device slows the heart rate of the patient.

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In regard to claims 13 and 58, applicant's attention is directed to epicardial "sub-portion" locations **74** in Fig.1.

In regard to claims 14 and 49, the intervals between ECG beats are timed and used to calculate the estimated current for non-excitatory pulse S_c as shown in Fig.1. Note that S_c occurs at t_c which is 20 milliseconds before the next beat t_2 .

In regard to claim 37, applicant's attention is directed to electrodes **62** and **64** of Fig.8 (col.5, lines 18-22).

In regard to claim 38, applicant's attention is directed to col.5, lines 22-24.

In regard to claim 51, the stimulator **60** is a Medtronic Symbiosis series programmable pacemaker which would inherently have memory for storing programmed data as well as a processor/controlling means for performing the device's pacing functions.

Allowable Subject Matter

7. Claims 4-9, 11, 12, 15, 22, 23, 28, 29, 32-34, 36, 39-43, 45, 48, 50, 59, and 60 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 16, 17, 24-27, 46, and 52-57 remain allowed.

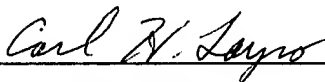
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Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl H. Layno whose telephone number is (703) 308-3694. The examiner can normally be reached on M-F from 8:30 AM to 5:00 PM. A voice mail message may be left if desired.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes, can be reached on (703) 308-5181. The current fax number for this Group is (703) 308-3590 or (703) 308-3588.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Patent Analysts Chantae Dessau whose telephone number is (703) 605-1237 or Tiffany Tabb whose telephone number is (703) 605-1238.



Carl H. Layno
Patent Examiner

CHL
12/15/00